CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.05/KRIDL/WMM/Gradation/2014-15

17.06.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to Roads and Drains at Balaji Enclave, Dwarakanagara in Ward No.05, BBMP, Bangalore.

Reference : AEE/BTP/362/2014-15 Dated: 06.06.2014

Date of Testing : 17.06.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 25300

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	955	955	3.8	96.2	95-100
22.4	5110	6065	24.0	76.0	60-80
11.2	5585	11650	46.0	54.0	40-60
4.75	4650	16300	64.4	35.6	25-40
2.36	3825	20125	79.5	20.5	15-30
0.600	2250	22375	88.4	11.6	8-22
0.075	2560	24935	98.6	1.4	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.05/KRIDL/SDBC/Bitumen/2014-15 07.07.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to Roads and Drains at Balaji Enclave, Dwarakanagara in Ward No.05, BBMP, Bangalore.
REFERENCE	AEE/BTP/362/2014-15 Dated: 06.06.2014
SAMPLE I/D	Roads and Drains at Balaji Enclave, Dwarakanagara in Ward No.05.
DATE OF TESTING	07.07.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	474.5	475
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25.5	25.00
7. Bitumen content in %	5.10	5.00
8. Average	**5.05**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	42.56	8.97	8.97	91.03	90-100
4.75	261.3	55.07	64.04	35.96	35-51
2.36	50.85	10.72	74.75	25.25	24-39
1.18	40.25	8.48	83.24	16.76	15-30
0.3	19.88	4.19	87.43	12.57	9-19
0.075	30.21	6.37	93.79	6.21	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	28.55	5.71	5.71	94.29	90-100
4.75	260.4	52.08	57.79	42.21	35-51
2.36	70.21	14.04	71.83	28.17	24-39
1.18	43.22	8.64	80.48	19.52	15-30
0.3	37.1	7.42	87.90	12.10	9-19
0.075	25.65	5.13	93.03	6.97	3-8

Civil Tech Consultants & Engineers Bangalore

Note:

- This test report should not be reproduced except in full, without written approval of the laboratory
- The results indicated above are based on the tests carried out on the samples received in the laboratory
- Any Query regarding the report must be reported within 15 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthiganapathinagara, Basaveshwaranagar, Bangalore-560079.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com